

507, 334

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
18 September 2003 (18.09.2003)

PCT

(10) International Publication Number
WO 03/077501 A1

(51) International Patent Classification⁷: **H04L 29/06**

(21) International Application Number: PCT/IB03/00570

(22) International Filing Date: 12 February 2003 (12.02.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
02076032.8 14 March 2002 (14.03.2002) EP

(71) Applicant (for all designated States except US): **KONINKLIJKE PHILIPS ELECTRONICS N.V.** [NL/NL];
Groenewoudseweg 1, NL-5621 BA Eindhoven (NL).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **BODLAENDER, Maarten, P.** [NL/NL]; Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL).

(74) Agent: **GRAVENDEEL, Cornelis**; Internationaal Octrooibureau B.V., Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL).

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

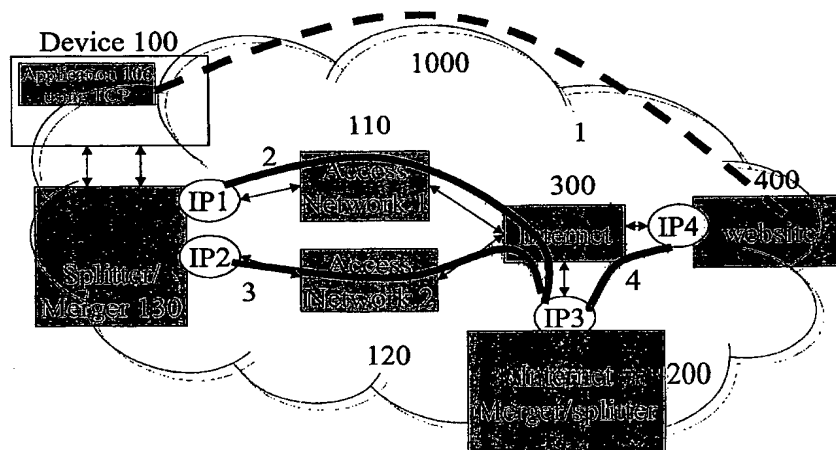
(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

[Continued on next page]

(54) Title: METHOD OF AND SYSTEM FOR MULTI-PATH COMMUNICATION



(57) **Abstract:** The invention relates to a method of and to a system (1000) for dealing with network congestion. A first internet-working device (100) may have several paths available (110; 120) for accessing a second device (400) through a network (AN1; AN2). The first device may e.g. have a low-bandwidth connection that is always operational and/or a high-bandwidth connection which is only operational when the device is in its docking station. The basic concept of the invention is embodied in a splitter/merger device (130) that proxies a connection (1), such as a TCP-connection, splits the connection (1) into multiple separate connections (2, 3) which are available, and routes packets (140) over these multiple connections to an external splitter/merger component (200). The splitter/merger device (130; 134; 142; 144; 152) divides the packets over the available connections in dependence of the progress of transport along each of these connections (2, 3). The functions of the splitter/merger components (130; 200) are symmetric and mirrored if there is both incoming (620; 140, 600) and outgoing (140; 500, 620) traffic.

WO 03/077501 A1